Appl. No. 09/964,766
Amdt. Dated April 17, 2006
Reply to Office Action of October 17, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-55 (canceled)

56. (withdrawn) A method of evaluating a node for re-directing data from a first
communication path, having a source node and a destination node, along a second
communication path, along a second communication path, comprising the steps of:
selecting a test node on said first communication path between said source node and
said destination node and said destination node, selecting a test node on said second
communication path, determining the value of a parameter of a test path between said
test nodes, and evaluating the test node on said first path for re-directing data to said
second path based on the determined value of said parameter.

57. (withdrawn) A method as claimed in claim 56, further comprising selecting a plurality of
test nodes on said first communication path between said source node and said
destination node, determining the value of a parameter of a test path from each of
said plurality of test nodes on said first communication path to said test node on said
second communication path, and selecting one of said plurality of test nodes on said
first communication path for redirecting data to said second path based on the values
of said parameters.

58. (withdrawn) A method as claimed in claim 57, further comprising extending each test
path from each of said plurality of test nodes to an imaginary node by a respective
imaginary path, and for each of said plurality of test nodes on said first
communication path, determining the value of a parameter of said test path from said
imaginary node to the test node on said second path, and selecting a node from said
plurality of test nodes on said first communication path based on the values of said
parameters.

59. (withdrawn) A method as claimed in claim 58, further comprising setting equal values of
said parameter for each of said imaginary paths.

60. (withdrawn) A method as claimed in claim 58, further comprising setting the value of
said parameter for each of said portions of said first communication path between
adjacent said test nodes on said first communication path at a value which excludes
the or each portion from each test path.

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61. (withdrawn) A method as claimed in claim 57, further comprising selecting a plurality of
    test nodes on said second communication path and determining the value of a
    parameter of a test path between each of said plurality of test nodes on said first
    communication path and each of said plurality of test nodes on said second
    communication path, and selecting a node for re-directing data to said second
    communication path from said plurality of test nodes on said first communication
    path based on the determined values of said parameter.

62. (withdrawn) A method as claimed in claim 61, further comprising extending each of said
    test paths from each of said test nodes on said second communication path to an
    imaginary node by a respective imaginary path, and for each of said plurality of test
    nodes on said second communication path, calculating the value of a parameter of the
    test path from said imaginary node to each of the test nodes on said first
    communication path, and selecting a node for directing data to said second
    communication path from said plurality of test nodes on said first communication
    path based on the values of said parameter.

63. (withdrawn) A method as claimed in claim 62, further comprising step of setting
    substantially equally values of said parameter for each of said imaginary paths.

64. (withdrawn) A method as claimed in claim 62, further comprising setting a value of said
    parameter for the portion of said second path between each adjacent test node on said
    second communication path such that the or each portion of said second
    communication path is excluded from each test path.

65. (withdrawn) A method as claimed in claim 61, wherein the step of selecting a plurality of
    test nodes on said second communication path, comprises selecting a plurality of test
    nodes connected to three or more communication links.

66. (withdrawn) A method as claimed in claim 56, wherein said parameter is selected from
    the group consisting of (a) path length, (b) path cost, (c) path capacity, (d) density of
    data on the path, (e) the number of nodes on the path and (f) the number of nodes on
    the path having three or more communication links.

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67. (withdrawn) A method as claimed in claim 57, further comprising selecting a node for
   re-directing data to said second communication path from said plurality of test nodes
   if a test path excludes all nodes on said first communication path other than said
   plurality of test nodes.

68. (withdrawn) A method as claimed in claim 57, comprising selecting a node for re-
   directing data to said second communication path from one of said source node and
   one or more other nodes, if any between said source node and the first of said
   plurality of test nodes on said first communication path if each of said test paths
   include said source node or one or more of said other nodes or said destination node.

69. (withdrawn) A method as claimed in claim 68, comprising selecting said source node as
   said node for re-directing data to said second communication path if each of said test
   paths includes said source node or said destination node.

70. (withdrawn) A method as claimed in claim 57, further comprising the step of selecting a
   second communication path from a plurality of communication paths connected to
   said destination node, such that the selected second communication path shares the
   minimum number of communication links with the first communication path.

71. (withdrawn) A method as claimed in claim 70, comprising selecting said second
   communication path such that said second communication path shares the minimum
   number of nodes with said first communication path between said test node on said
   communication path and said destination and said destination node.

72. (withdrawn) A communication network comprising a first communication path having a
   source node and a destination node and a plurality of intermediate nodes
   therebetween, a second communication path connected to said destination node, and
   wherein an intermediate node on said first communication path includes re-routing
   means for re-routing data intended for continued transmission on said first
   communication path along said second communication path, said intermediate node
   being selected from a plurality of said intermediate nodes according to the method as
   claimed in claim 57.

Claims 73-74 (canceled)

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75. (new) A communication network including a first communication path having a plurality
   of switching routers, and a second communication path having at least one
   communication path element different from said first communication path, said first
   communication path divided into at least one section, each said section having a
   selected switching router, wherein said selected switching router of said section
   includes output means for outputting data with a label for routing data along one of
   said first and second communication paths, and routing means responsive to a fault in
   the transmission capability of said section of said first communication path for
   routing data along said second communication path.

76. (new) A communications network as claimed in claim 75, wherein said selected router is
   positioned at a head end of said section.

77. (new) A communications network as claimed in claim 76, wherein second
   communication path shares as few resources as possible with said fist communication
   path.

78. (new) A communications network as claimed in claim 77, comprising a plurality of
   segments wherein at least some segments overlap.

79. (new) A communications network as claimed in claim 77, wherein said selected
   switching router is configured to route said data on said second communication path
   back onto the next segment of said first communication path.

80. (new) A communications network as claimed in claim 77, wherein an indication of a
   failure downstream of said selected router is transmitted by a fast flooding LSA
   mechanism.

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